Received: 3 February 2016 | Revised: 16 August 2017 | Accepted: 4 September 2017

DOI: 10.1002/job.2240

WILEY Journal of Organizational Behavior

RESEARCH ARTICLE

The role of self-regulation in the relationship between abusive supervision and job tension

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Funding information
National Institute for Occupational Safety and Health (NIOSH) Pilot Research Grant through the Sunshine Education and Research Center at the University of South Florida; The Society for Human Resource Management Dissertation Grant.

Summary

Trait and state self-regulation both have critical influences on workplace behavior, but their influences are thought to operate quite differently. We draw from social exchange and ego depletion theories to investigate the relationship between trait and state self-regulation, as well as how they differentially affect the relationship between subordinates' perceptions of abusive supervision and job tension. Specifically, we examine (a) how the interaction between abusive supervision and trait self-regulation affects job tension and (b) how state self-regulation mediates the relationship between abusive supervision and job tension. Using 3 studies that include an experiment (n = 81) and 2 field studies with cross-sectional (n = 157) and time-separated (n = 109) data, we demonstrate that the interaction between abusive supervision and trait self-regulation increases experienced job tension for subordinates who report higher levels of abusive supervision and trait self-regulation than others. Also, we provide evidence that abusive supervision is indirectly associated with job tension through state self-regulation. This study's findings have important implications for abusive supervision and self-regulation research, as well as social exchange and ego depletion theories, because we extend our understanding of how trait and state self-regulation affect cognitive responses associated with abusive supervision.

KEYWORDS

abusive supervision, job tension, self-regulation, social exchange

1 | INTRODUCTION

Self-regulation is a uniquely human characteristic (Baumeister, Gailliot, DeWall, & Oaten, 2006) and an important building block of civilized society (Baumeister & Alquist, 2009; Leary & Guadagno, 2013). The link between self-regulation and civilization is predicated on the notion that self-regulation (i.e., individuals' abilities to alter their behaviors to meet personal standards, social expectation, and/or desired goals; Baumeister, Vohs, & Tice, 2007; Lanaj, Johnson, & Barnes, 2014) is critical in enabling individuals to resist temptations, inhibit retaliatory acts against perceived slights, and subjugate their personal desires in efforts to help others. With such a broad swath of behaviors associated with self-regulation, it follows that self-regulation has been used to predict numerous outcomes across a variety of contexts. For example, increased work engagement and performance (Johnson, Lanaj, & Barnes, 2014; Lanaj et al., 2014), academic excellence (Duckworth & Gross, 2014; Mischel, 2014), low incarceration rates (Baumeister & Tierney, 2011), facilitating healthy relationships (Tangney, Baumeister, & Boone, 2004), and engaging in organizational citizenship behaviors (Trougakos, Beal, Cheng, Hideg, & Zweig, 2015) are all outcomes associated with self-regulation.

Each of the aforementioned outcomes of self-regulation was studied in decidedly positive contexts (e.g., improving performance and increasing engagement in extrarole behaviors). However, the effects of self-regulation in negative contexts remains largely understudied. The impetus for this study stemmed from recognition that self-regulation needs to be studied in a variety of contexts and that further inspection of the various forms of self-regulation (i.e., trait and state self-regulation) is necessary to progress this stream of research forward. We chose abusive supervision as the negative context within which to study the effects of both trait and state self-regulation.

Abusive supervision is defined as "subordinates' perceptions of the extent to which supervisors engage in *the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact*" (Tepper, 2000, p. 178). Recent reviews and meta-analyses have demonstrated

that abusive supervision is deleteriously associated with a range of employee perceptions, behaviors, and workplace outcomes (Mackey, Frieder, Brees, & Martinko, 2017; Martinko, Harvey, Brees, & Mackey, 2013; Tepper, 2007). Abusive supervision is a prototypically negative social exchange relationship (Peng, Schaubroeck, & Li, 2014) because it is marked by reciprocity norms (Molm, 1994) that are violated. Subordinates may not reciprocate supervisory abuse for many reasons, including the fear of receiving retaliation from their supervisors (Mitchell & Ambrose, 2007) or being subject to organizational-level sanctions (Kiewitz, Restubog, Shoss, Garcia, & Tang, 2016). Despite these consequences, resisting the initial impulse to reciprocate the negative behaviors associated with perceived supervisory abuse requires self-regulation.

Self-regulation has garnered an increased level of attention in the abusive supervision literature in recent years (e.g., Lian, Ferris, Morrison, & Brown, 2014; Mackey, Ellen, Hochwarter, & Ferris, 2013; Yam, Fehr, Keng-Highberger, Klotz, & Reynolds, 2016). Not surprisingly, self-regulation theories (e.g., ego depletion theory and self-control theory) are used to explain why supervisors engage in behavior that is perceived as abusive (Whitman, Halbesleben, & Shanine, 2013), as well as how subordinates cope with perceiving supervisory abuse (Nandkeolyar, Shaffer, Li, Ekkirala, & Bagger, 2014). Although self-regulation research has included both trait and state self-regulation, most empirical investigations of the relationship between abusive supervision and self-regulation have been limited to examining state self-regulation (e.g., Lian, Brown, Ferris, Liang, Keeping, & Morrison, 2014; Mawritz, Greenbaum, Butts, & Graham, in press). The results of these studies improve our understanding of state self-regulation and subordinates' reactions to abusive supervision, but they are incomplete because they do not consider how trait self-regulation may differentially predict subordinates' outcomes. Thus, despite the breadth and importance of prior findings, an examination of the association between both trait and state self-regulation and negative outcomes remains noticeably absent from the literature.

In this investigation, we contribute to prior research by examining the differential impacts of trait and state self-regulation on the relationship between subordinates' perceived abusive supervision and experienced job tension. Job tension (i.e., employees' psychological job strain associated with psychological responses to perceived disturbances in their work environments; Chisholm, Kasl, & Eskenazi, 1983) is uniquely suited for studying the potential effects of self-regulation in the workplace because it captures a wide array of job strains that can stem from the loss of self-regulatory resources. We argue that although trait and state self-regulation are intrinsically linked, they each provide unique insight into the relationship between abusive supervision and job tension. The theoretical and empirical differences between trait and state self-regulation are not well understood, nor has research utilizing social exchange and ego depletion theories been extended to clearly delineate why and under what conditions trait and state self-regulation may operate differently. Thus, the purpose of our study is to combine experimental and field study research designs to investigate the relationship between trait and state self-regulation in order to better understand their roles in the relationship between abusive supervision and job tension.

2 | THEORETICAL FOUNDATIONS AND HYPOTHESIS DEVELOPMENT

2.1 | Trait and state self-regulation

Behaviors commonly associated with self-regulation include resisting temptations (Mischel, 1974) and the suppression of certain thoughts and behaviors (Bandura, 1989; Carver & Scheier, 1982; Trougakos et al., 2015). Prior research has demonstrated that self-regulation is associated with numerous beneficial outcomes, including engaging in helping behaviors (Lanaj, Johnson, & Wang, 2016) and being able to focus on desired goals despite distractions (Duckworth & Gross, 2014). Many of these outcomes require long-term effort, or the "habitual inhibition" of impulses (Imhoff, Schmidt, & Gerstenberg, 2014, p. 413), which characterizes self-regulation as a relatively stable trait-like individual difference (Tangney et al., 2004). This type of self-regulation is known as trait self-regulation. Generally, individuals who possess high levels of trait self-regulation are better at resisting temptations and suppressing unwanted thoughts and behaviors than individuals with low levels of trait self-regulation.

However, research also has demonstrated that self-regulation varies within individuals such that the capability to self-regulate behavior can vary throughout the day because self-regulatory capabilities are affected by previous self-regulatory attempts (Converse & DeShon, 2009; Schmeichel, 2007). Research suggests that state self-regulation represents a finite store of self-regulatory energy available to individuals (i.e., "willpower"; Baumeister et al., 2007; Baumeister & Tierney, 2011). Conceptualizing self-regulation as state-like, in addition to its early trait-like conception, led Muraven, Tice, and Baumeister (1998) to argue for a limited strength model of self-regulation, which serves as the foundation of ego depletion theory.

Ego depletion theory posits that efforts to engage in self-regulation result in the expenditure, or depletion, of a *limited* supply of state self-regulatory resources (Baumeister et al., 2007; Lanaj et al., 2016). When regulatory resources become depleted, individuals enter a state of ego depletion in which they are unable to control their behavior effectively (Deng, Wu, Leung, & Guan, 2016). Prior research has demonstrated that, on average, individuals spend about 8 hr per day feeling desires and 3 hr actively resisting those same desires (Hofman, Vohs, & Baumeister, 2012). Thus, it follows that individuals' capabilities to resist temptation, or successfully alter their behavior, decrease throughout the course of the day because all prior attempts at self-regulation cause subsequent attempts to be less successful because individuals deplete their self-regulatory resources (Vohs et al., 2008). Self-regulation represents a finite resource that varies within individuals, so it can be viewed as a state, but it also varies between individuals, so it also can be considered a trait. Thus, self-regulation is conceptualized as two separate, but related, constructs: trait and state self-regulation (De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012; Gailliot, Gitter, Baker, & Baumeister, 2012; Tangney et al., 2004).

2.2 | Negative social exchange relationships

Empirical evidence demonstrates the numerous beneficial outcomes associated with possessing high trait and state self-regulation (e.g.,

Johnson et al., 2014; Mischel, 2014). Despite these findings, we argue that individuals' abilities to self-regulate also can be associated with negative outcomes (e.g., job tension), especially in the context of negative social exchange relationships. Social exchange theory describes the interdependent exchanges that occur between parties (e.g., employees and organizations) to explain how and why relationships develop over time (Cropanzano, Anthony, Daniels, & Hall, 2017; Cropanzano & Mitchell, 2005). Two critical aspects of social exchange theory are the interdependent nature of social exchange relationships and reliance on reciprocity norms when evaluating the balance in social exchange relationships (Cropanzano & Mitchell, 2005; Molm, 1994; Peng et al., 2014). For a social exchange relationship to occur, there must be reciprocal exchanges that require each party to respond to each other; generally, the actions that comprise these exchanges can be characterized as positive or negative. Regardless of the nature of the exchange relationship (i.e., positive or negative), individuals tend to return the treatment they receive with similar treatment.

Social exchange theory and ego depletion theory complement each other because they both offer insight into how individuals interact with each other (e.g., Blackhart, Nelson, Winter, & Rockney, 2011; Porath, Gerbasi, & Schorch, 2015), which ultimately facilitates the establishment and maintenance of societies. Positive and negative social exchanges both incur debts that individuals feel the need to reciprocate (Cropanzano & Mitchell, 2005). However, it is self-regulation that facilitates the altering of the behaviors necessary to reciprocate positive exchanges or to inhibit the reciprocation of negative exchanges. Further, self-regulation allows individuals to subjugate their own personal desires in an effort to better the group (Balliet & Joireman, 2010) and help others (Lanaj et al., 2016). Similarly, if self-regulation did not facilitate the inhibition of behaviors intended to reciprocate negative social exchanges (e.g., accommodation; Finkel & Campbell, 2001), then there likely would be an ongoing cycle of retaliation. This series of retaliation can be considered a "cathartic approach to exchange" because it suggests that people find relief through reciprocating the negative behaviors of others (Cropanzano & Mitchell, 2005, p. 878).

Thus, social exchange and ego depletion theories both offer insight into employees' responses to supervisory treatment (e.g., abusive supervision), but neither can explain the effects of self-regulation in isolation. Accordingly, we integrate the tenets of social exchange and ego depletion theories below in order to describe the perceived costs and benefits of self-regulation as we develop our study hypotheses.

2.3 | Perceived costs and benefits of self-regulation

Reciprocating negative behaviors as a form of catharsis, similar to the "eye for an eye" philosophy, becomes more difficult when relationships involve an imbalance of power, such as when negative social exchange relationships are shared between supervisors and subordinates. Subordinates who self-regulate when perceiving slights or negative behaviors directed at them from their supervisors may feel as if they should not reciprocate due to their fear of potential repercussions (e.g., firing and demotion). As such, the ability to self-regulate when perceiving supervisory abuse can be beneficial in many cases because it protects resources (e.g., career, performance ratings, and financial stability) valued by subordinates. This suggests that state self-regulation may have beneficial effects on subordinates' experienced job tension because they should feel more "in control" of their resources and outcomes, which enables them to resist the urge to retaliate against their supervisors.

Thus, if negative social exchange relationships have been established between supervisors and subordinates, the subordinates' current levels of ego depletion (i.e., state self-regulation) likely determine how well they can resist their temptations to reciprocate the supervisors' negative behaviors. Therefore, we theorize that abusive supervision contributes to subordinates' ego depletion as they resist the desire to retaliate against perceived supervisory abuse. Further, we argue that subordinates' stores of state self-regulatory resources affect experienced job tension. Thus, we integrate the tenets of social exchange and ego depletion theories to theorize that abusive supervision has an indirect effect on job tension through subordinates' state self-regulation.

> **Hypothesis 1.** *State self-regulation will mediate the positive relationship between abusive supervision and job tension.*

Alternatively, we argue that there is a psychological cost to continuously not reciprocating negative behaviors. If subordinates choose not to follow basic reciprocity norms (e.g., retaliate against abusive supervisors) repeatedly, they remain on the receiving end of imbalanced and negative social exchange relationships with their supervisors. The decision not to reciprocate may be associated with feelings of job tension because subordinates likely feel trapped and unable to right the wrongs they perceive have been committed against them. Subordinates capable of engaging in the long-term suppression of their feelings and desires likely possess high levels of trait self-regulation. These subordinates may feel as if they *always* subjugate their feelings and desires. In doing so, these subordinates may be prone to experiencing job tension when compared to those who often fail to resist temptation because they are on the receiving end of relationships that are continuously marked by imbalance and nonreciprocated negative social exchanges.

Trait self-regulation is an individual difference that does not tend to vary over time like state self-regulation. Accordingly, abusive supervision does not affect subordinates' *levels* of trait self-regulation. Instead, it is the interactive effects of abusive supervision and trait self-regulation that predict subordinates' experienced job tension. Thus, we draw from social exchange theory to hypothesize that subordinates who have higher levels of trait self-regulation will report greater increases in job tension as abusive supervision increases than subordinates who have lower levels of trait self-regulation.

> **Hypothesis 2.** *The interaction between trait self-regulation and abusive supervision will be associated with job tension, such that subordinates with higher levels of trait self-regulation will report greater increases in job tension as abusive supervision increases than subordinates with lower levels of trait self-regulation.*

3 | METHOD

3.1 | Plan of the research

We use both an experimental and a survey-based approach across three separate studies to test our hypotheses. First, Study 1 utilized an experiment to determine the underlying relationship between state and trait self-regulation. The experiment was designed to provide insight into the operation of state self-regulation (e.g., the process and effects of ego depletion) and to define the role of trait self-regulation within the context of ego depletion and the loss of state self-regulatory resources. Understanding how state and trait self-regulation operate in tandem is foundational to interpreting the subsequent studies' results, so we used the experimental results from Study 1 to reveal the nature of both forms of self-regulation within the context of self-regulatory resource depletion.

Next, Studies 2 and 3 were field studies with survey-based designs that included data collected from working adults in order to test our hypotheses. Constructive replication study designs can utilize differences in the measures used to assess constructs, rating sources, sampling procedures, or subject pools to strengthen research designs and facilitate substantive contributions to research (Hochwarter, Ferris, & Hanes, 2011; Lykken, 1968) by enabling more robust evidence for the validity of obtained empirical findings than possible when using single sample study designs (Wright & Sweeney, 2016). Between Studies 2 and 3, we used two subject pools (i.e., Amazon Mechanical Turk [MTurk] and Qualtrics Panel Services) and sampling procedures (i.e., cross-sectional study design and time-separated study design) to constructively replicate our findings and examine the validity of the hypothesized model.

4 | STUDY 1

4.1 | Procedure and participants

Participants were recruited for Study 1 through MTurk. Its efficiency in collecting data, the similarity of the results between MTurk respondent pools and traditional respondent populations (Paolacci, Chandler, & Ipeirotis, 2010; Sprouse, 2011), and the ability to recruit respondents for modest levels of compensation have made MTurk a popular data collection tool for scholars. Its continued use over recent years has supported its inclusion in empirical studies published in the top journals in the management and psychology fields (e.g., *Journal of Organizational Behavior*; Carmeli, Brammer, Gomes, & Tarba, in press). We posted an advertisement for our survey that indicated that participants would need the following to participate: 30 min of uninterrupted time to complete the experiment and a desktop or laptop computer (i.e., no mobile devices). All participants who began the experiment were randomly assigned to either the control group or the treatment group. The experiment itself was composed of three parts: an initial survey, a manipulation, and a final survey.

The initial survey asked participants to report trait self-regulation, state self-regulation, and demographic information. The intent of the manipulation was to deplete participants' state self-regulation by having them engage in an ego-depleting task. On the basis of previous research that reviewed the effect sizes associated with various ego depletion tasks (Hagger, Wood, Stiff, & Chatzisarantis, 2010), we selected a variation of the "crossing out" task. During the manipulation, the control and treatment groups were shown two paragraphs of text, one at a time, from an upper-level structural equation modeling textbook. Participants in the control group were asked to retype the text into a box on their screen. Participants in the treatment group also were asked to retype the text into a box on their screen, but they also were given additional instructions. For the first paragraph displayed, they were asked not to press the "E" key on their keyboard. Thus, if they saw the word "lemonade," they would type "lmonad." For the second paragraph, they were asked not to press the "E" key if the letter "E" was next to, or one letter removed from, another vowel. Thus, if participants read the word "response," it would be typed in full because neither "E" meets the criteria for removal. However, the word "category" would be typed as "catgory" because the "E" is one letter removed from a vowel. This task depletes individuals' state self-regulation because participants constantly must inhibit the natural reaction to press the "E" key on their keyboard. Following the manipulation, participants were asked to complete measures of trait and state self-regulation.

We took several steps to ensure participants' attention remained on the experiment. First, we included two instructed items that asked respondents to select a specific response when answering an item. The inclusion of instructed items enabled us to review the data and screen for respondents who dedicated adequate levels of attention during the completion of the survey (Desimone, Harms, & Desimone, 2015; Meade & Craig, 2012). Failure to select the correct responses for either instructed item resulted in participants being removed from the analyses (n = 7). Second, an elapsed time was calculated for each participant. It was deemed that completing the experiment in under 18 min was not possible, so participants who completed the survey in less than 18 min were removed from the analyses (n = 1).

Of the 92 participants who began the experiment, 81 usable responses were submitted (88%). Demographically, the respondents (52% female) averaged approximately 37 years of age (M = 37.2, SD = 12.0), 6 years of organizational tenure (M = 6.5, SD = 7.1), and worked approximately 40 hr per week (M = 42.5, SD = 12.0).

4.2 | Measures

4.2.1 | Self-regulation

Two separate measures of self-regulation were used in Study 1. First, we used Maloney, Grawitch, and Barber's (2012) 8-item brief self-control scale to measure trait self-regulation (Time 1: α = .88; Time 2: α = .87). We used a 7-point response format ranging from *not at all like me* (1) to *very much like me* (7). An example of an item from this measure is "I often act without thinking through all the alternatives." Second, we used a 10-item measure of state self-control capacity (Twenge, Muraven, & Tice, 2004; Time 1: α = .92; Time 2: α = .93). We used a 7-point response format ranging from *strongly disagree* (1) to *strongly agree* (7). An example item from this measure is "I am having a hard time controlling my urges."

4.3 | Data analysis and results

Descriptive statistics and zero-order correlations are shown in Table 1. We used analysis of variance and a series of contrasts in which, depending on the analysis, either the control group or the lower trait self-regulation groups were used as the reference categories to conduct the analyses. First, we investigated the mean differences in both state and trait self-regulation between pre- and post-manipulations within the treatment groups. Results from these analyses were in line with our expectations. There was a significant mean difference, $F(1, 36) = 4.869$, $p < .05$, in state self-regulation within the group when comparing participants' means before and after the manipulation, which indicated that there was a decrease in state self-regulation due to the manipulation. Additionally, there was not a significant mean difference in participants' trait self-regulation pre- and post-manipulations. Next, the results indicated that there was not a significant difference in trait self-regulation between participants in the control and treatment groups prior to the ego depletion task, $F(1, 79) = 1.43$, *ns*. Similarly, there was not a significant difference in trait self-regulation between participants in the two groups after the ego depletion task, $F(1, 79) = 2.08$, *ns*. Further, the results demonstrated that there was not a significant difference for state self-regulation between groups before the ego depletion task, $F(1, 79) = 3.61$, *ns*, but that there was a significant difference (−.78 mean difference between groups) following the ego-depleting task, $F(1, 79) = 6.40$, $p < .05$. This contrast estimate demonstrated that the participants in the treatment group had lower levels of state self-regulation than the participants in the control group following the manipulation. Thus, we concluded that the manipulation was successful.

Then, we examined the relationship between trait and state self-regulation. Thus, we created higher and lower trait self-regulation groups by conducting a mean split based on the mean of trait self-regulation ($M = 4.3$). Results indicated that following the ego depletion task, there was a significant difference in state self-regulation, $F(1, 79) = 1.74$, $p < .01$, between the higher and lower trait self-regulation groups. Ultimately, this contrast estimate indicated that individuals with higher trait self-regulation reported higher levels of state self-regulation than individuals with lower trait self-regulation after engaging in an ego-depleting task. Overall, the results of Study 1 demonstrated that trait and state self-regulation are intrinsically linked but sufficiently independent constructs.

TABLE 1 Means, standard deviations, and bivariate zero-order correlations among Study 1 variables

Variable	1	2	3	4
1. State self-regulation (T1)	(.92)	.60**	.62**	.54**
2. State self-regulation (T2)	.90**	(.93)	.61**	.50**
3. Trait self-regulation (T1)	.73**	.76**	(.88)	.90**
4. Trait self-regulation (T2)	.71**	.70**	.96**	(.87)
Control group—Mean ($\bar{x}$)	5.68	5.48	4.76	4.76
Control group—Standard deviation (σ)	1.27	1.40	1.44	1.38
Treatment group—Mean ($\bar{x}$)	5.13	4.70	4.40	4.33
Treatment group—Standard deviation (σ)	1.28	1.32	1.29	1.26

Note. Correlations (r) for the control group ($N = 44$) are presented below diagonal. Correlations (r) for the treatment group ($N = 37$) are presented above diagonal. Overall reliability for each measure across both groups appears in parentheses on the diagonal. Statistical tests were based on two-tailed tests.
*$p < .05$; **$p < .01$.

5 | STUDY 2

5.1 | Procedure and participants

Online surveys were completed by participants recruited through MTurk. For Study 2, respondents who were adults with supervisors working at organizations in the United States other than MTurk were paid 50 cents each to complete a survey. The survey included the focal study variables, as well as several short measures of variables unrelated to this investigation that were used to hide the true purpose of this study. In addition, each survey included one instructed item. Procedural techniques (e.g., instructed items, measures not related to the current study, protecting respondents' anonymity, and altering the number and type of scale points) were adopted to help mitigate common method variance's (CMV) potentially detrimental effects on the observed relationships (e.g., biasing relationships; Johnson, Rosen, & Djurdjevic, 2011; Podsakoff, MacKenzie, Lee, & Posdsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012; Podsakoff, Whiting, Welsh, & Mai, 2013).

Of the 200 participants who began the survey, 157 usable responses were submitted (79%). Demographically, the respondents (50% female) averaged approximately 35 years of age ($M = 35.1$, $SD = 11.9$), 6 years of organizational tenure ($M = 5.65$, $SD = 5.7$), and worked approximately 38 hr per week ($M = 38.4$, $SD = 8.6$). About 79% of respondents indicated that they considered themselves full-time employees, whereas the remaining 21% classified themselves as part-time employees.

5.2 | Measures

We used the same measures of trait self-regulation (α = .88) and state self-regulation (α = .88) in Study 2 that were used in Study 1.

5.2.1 | Abusive supervision

We used Mitchell and Ambrose's (2007) 5-item version of Tepper's (2000) abusive supervision scale (α = .94). This abbreviated measure has been used in numerous abusive supervision studies (e.g., Mawritz, Folger, & Latham, 2014) and correlates very highly with Tepper's original 15-item measure (e.g., $r = .97$; Garcia, Wang, Lu, Kiazad, & Restubog, 2015). We used a 5-point response format ranging from *I cannot remember him/her ever using this behavior with me* (1) to *he/she uses this behavior very often with me* (5). A sample item is "My boss puts me down in front of others."

5.2.2 | Job tension

We used House and Rizzo's (1972) 7-item job tension measure in Study 2 (α = .85). We used a 7-point response format ranging from *never* (1) to *always* (7). "Problems associated with my job have kept me awake at night" is an example item from this measure.

5.2.3 | Demographic control variables

We controlled for subordinates' age, gender, and organizational tenure in the analyses. Previous research has found that these demographic variables can affect employees' experienced job tension (Smith, Brice, Collins, Matthews, & McNamara, 2000). Thus, we included age, gender, and organizational tenure as control variables in order to test the ability of the independent variables to incrementally predict variance in the dependent variables above the variance accounted for by theoretically relevant demographic variables that could affect the obtained results (Bernerth & Aguinis, 2016; Carlson & Wu, 2012). Gender was coded as follows: male = 0, female = 1. Organizational tenure was measured in years.

5.3 | Data analysis

We used SPSS 22.0 to conduct regression analyses (Cohen, Cohen, West, & Aiken, 2003) in order to test the study hypotheses. Prior to data analysis, all items from the measures were aggregated to provide the mean score for each respondent. Then, we created interaction terms using the centered values for abusive supervision and trait self-regulation. Finally, we supplemented the regression results by using RWA Web (Tonidandel & LeBreton, 2015) to conduct relative weight analyses (Johnson, 2000). Specifically, we used bootstrapping procedures (n = 10,000) with the raw data to estimate the relative contribution each substantive and control variable made to the total amount of variance explained in the dependent variables.

We used Hayes' (2013) PROCESS macro for SPSS to determine whether state self-regulation mediated the relationship between abusive supervision and job tension. The moderation hypotheses were then tested in three steps. First, we entered the control variables (i.e., age, gender, and organizational tenure) in the first step of the regression equation. Then, we entered the main effects for abusive supervision and trait self-regulation in the second step of the regression equation. Finally, we entered the abusive supervision × trait self-regulation interaction in the third step of the regression equation. Additionally, we ran the analyses without any control variables. The relevant significance tests did not change when the control variables were excluded, so we retained the control variables because of their theoretical relevance to the dependent variable.

5.4 | Measurement model results

We used SPSS Amos 22.0 to conduct several confirmatory factor analyses (CFAs) to ensure constructs were independent. Three separate CFAs were conducted in order to verify that the proposed measurement model represented the best model fit to the data. The measurement model consisted of all measured variables, including abusive supervision, trait self-regulation, state self-regulation, and job tension. All variables within our model were parceled using the item-to-construct balance technique outlined by Little, Cunningham, Shahar, and Widaman (2002). Specifically, the highest and lowest loading items were distributed across parcels to create a relatively equal balance across three parcels for each latent variable (Williams, Vandenberg, & Edwards, 2009). We utilized partial disaggregation techniques to conduct the CFAs because several variables were measured using many items (e.g., 10 items were used to measure state self-regulation) and because abusive supervision is a low base-rate phenomenon with nonnormally distributed data at the item level; both of these issues are known to affect the ability to detect appropriate fit statistics in CFAs (Williams et al., 2009). Thus, parceling was appropriate for our purposes because it enabled us to examine a model with equal numbers of parcels across latent variables that each spread around item-level error.

The measurement model indicated an adequate fit to the data because the value for the comparative fit index was above .90 (.954; Bentler & Bonett, 1980; Bollen, 1989) and the value for the standardized root mean residual was below .08 (.052; Hoyle & Panter, 1995). The estimate of root mean square error of approximation (RMSEA; .094) did not fall within recommended values (i.e., ≤.08), but there are well-documented issues with RMSEA when testing models with small degrees of freedom (Kenny, Kaniskan, & McCoach, 2015). However, we note that the low degrees of freedom in our model are a result of parceling the items, rather than the model itself constraining the degrees of freedom. Thus, the obtained RMSEA value was unacceptable but likely stemmed from our decision to parcel instead of poor model design. Full results are presented in Table 2, which shows that our measurement model demonstrated better fit than each of the two alternative models tested (see Table 2). Specifically, the hypothesized model demonstrated better fit to the data than an alternative model that combined trait and state self-regulation into a single factor and an alternative model that combined all parcels onto a single factor.

Means, standard deviations, and bivariate zero-order correlations for Study 2 are presented in Table 3. The bivariate relationships of interest between abusive supervision and job tension were consistent with earlier findings in both direction and magnitude (e.g., Lian, Brown, et al., 2014; Lian, Ferris et al., 2014). Also, the mean for abusive supervision was low (i.e., M = 1.46), which is consistent with prior evidence that it is a low base-rate phenomenon (e.g., Mackey et al., 2017). Variance inflation factors (VIFs) and tolerances were examined to ensure that multicollinearity did not substantively affect the results. Per the

TABLE 2 Measurement model results

Model type	Fit statistics					
Study 2	χ^2	df	χ^2/df	CFI	RMSEA	SRMR
Hypothesized model	114.40	48	2.38	.954	.094	.052
Alternative model 1	263.17	51	5.16	.854	.163	.090
Alternative model 2	854.27	54	15.82	.449	.308	.194
Study 3	χ^2	df	χ^2/df	CFI	RMSEA	SRMR
Hypothesized model	71.47	48	1.49	.979	.067	.048
Alternative model 1	185.64	51	3.64	.878	.156	.112
Alternative model 2	719.22	54	13.32	.399	.338	.206

Note. Confirmatory factor analysis results for Study 2 (N = 157) and Study 3 (N = 109) are shown. The hypothesized model includes a latent variable with three parcels for each substantive construct. Alternative model 1 examined three factors, in which trait and state self-regulation were combined into a single factor. The single self-regulation factor consisted of all six self-regulation parcels from the hypothesized model. Alternative model 2 examined a single factor that included the parcels for all study variables. χ^2 = chi-square; df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean residual.

TABLE 3 Means, standard deviations, and bivariate zero-order correlations among Study 2 variables

Variable	1	2	3	4	5	6	7
1. Age	-	−.04	.47**	−.13	.09	.32**	−.25**
2. Gender	−.02	-	−.14	−.07	.15	.01	−.18
3. Organizational tenure	.54**	−.01	-	−.13	.09	.24**	−.11
4. Abusive supervision	−.06	.05	−.10	-	−.20*	−.32**	.44**
5. Trait self-regulation	.02	−.06	−.02	−.14	-	.49**	−.27**
6. State self-regulation	.09	−.15	.06	−.30**	.63**	-	−.32**
7. Job tension	.06	.07	.04	.27**	−.23**	−.46**	-
Study 2—Mean ($\bar{x}$)	35.08	.50	5.65	1.46	4.32	4.95	3.68
Study 2—Standard deviation (σ)	11.88	.50	5.71	.78	1.24	1.11	1.27
Study 2—α	-	-	-	.94	.88	.88	.85
Study 3—Mean ($\bar{x}$)	46.93	.29	13.26	1.33	5.70	5.49	3.49
Study 3—Standard deviation (σ)	11.33	.46	10.41	.74	.97	.88	1.47
Study 3—α	-	-	-	.97	.87	.86	.91

Note. Correlations (*r*) for Study 2 (*N* = 157) are presented below diagonal. Correlations (*r*) for Study 3 (*N* = 109) are presented above diagonal. Statistical tests were based on two-tailed tests. α = Cronbach's alpha. Gender was coded as follows: male = 0, female = 1. Organizational tenure was measured in years. *p < .05; **p < .01.

recommendations made by prior research (Fox, 1991; Montgomery, Peck, & Vining, 2012), VIF scores should be below 10 and tolerances should be no greater than 3. The results for all regression analyses demonstrated that VIF scores all were less than 1.5 and tolerances were no greater than 1.0, which demonstrated that multicollinearity likely did not substantively bias the obtained results.

5.4.1 | Hierarchically nested covariance structure models

We examined the results of hierarchically nested covariance structure models in order to determine the extent to which common method bias was present in the data (Cote & Buckley, 1987). Results indicated that more of the variance was explained by the trait factor (49.6%) than the method factor (12.0%) or random error (38.4%). Thus, we concluded that common method bias likely did not pose a substantive threat to the validity of inferences drawn from our results.

5.5 | Results

The results of the regression analyses for state self-regulation are presented in Table 4, whereas the results for trait self-regulation are presented in Table 5. First, we hypothesized that abusive supervision would have an indirect effect on job tension through state self-regulation. The results demonstrated that abusive supervision was negatively associated with state self-regulation (β = −.29, p < .01), that state self-regulation was negatively related to job tension (β = −.43, p < .01), and that the indirect effect of abusive supervision on job tension through state self-regulation was significant (β = .13, Z = 3.14, p < .01). Thus, Hypothesis 1 was supported.

Next, we hypothesized that trait self-regulation would moderate the relationship between abusive supervision and job tension. The moderation analyses demonstrated that abusive supervision (β = .24, p < .01), trait self-regulation (β = −.19, p < .05), and the abusive

TABLE 4 Results of regression analyses for state self-regulation in Studies 2 and 3

Predictor	β	*SE*	*t*	*p*
Mediator model (state self-regulation)				
Abusive supervision	−.29/−.28	.08/.09	−3.84/−3.10	<.01/<.01
Age	.07/.24	.09/.10	.82/2.44	*ns*/<.05
Gender	−.14/.01	.08/.09	−1.80/.12	*ns*/*ns*
Organizational tenure	−.01/.09	.09/.10	−.12/.88	*ns*/*ns*
Dependent variable model (job tension)				
Abusive supervision	.14/.24	.07/.09	1.92/2.73	*ns*/<.01
State self-regulation	−.43/−.39	.08/.09	−5.63/−4.22	<.01/<.01
Age	.08/.07	.08/.10	.96/.72	*ns*/*ns*
Gender	−.01/−.07	.07/.09	−.01/−.82	*ns*/*ns*
Organizational tenure	.04/−.02	.08/.10	.45/−.23	*ns*/*ns*
	Indirect effect	*SE*	*z*	*p*
Abusive supervision	.13/.11	.04/.06	3.14/2.45	<.01/<.01

Note. Regression results using state self-regulation for Study 2 (*N* = 157) and Study 3 (*N* = 109) respondents are shown. The value on the left reports Study 2 results, and the value on the right reports Study 3 results. Standardized beta coefficients (β) are reported. *SE* = standard error.

TABLE 5 Results of regression analyses for trait self-regulation in Study 2

	Job tension	
	Study 2	Study 3
Step 1		
Age	.05	−.06
Gender	.07	−.10
Organizational tenure	.02	−.09
ΔR^2	.01	.02
Step 2		
Abusive supervision	.24**	.31**
Trait self-regulation	−.19*	−.27**
ΔR^2	.11**	.19**
Step 3		
Abusive supervision × Trait self-regulation	.21**	.04
ΔR^2	.04**	.00

Note. Regression results for Study 2 (N = 157) and Study 3 (N = 109) are shown. Standardized beta coefficients (β) from the first regression step in which the effect appeared are reported. Gender was coded as follows: male = 0, female = 1. Organizational tenure was measured in years. *p < .05; **p < .01.

supervision × trait self-regulation interaction (β = .21, p < .01) were significant predictors of job tension (R^2 = .16). Further, relative weight analyses demonstrated that abusive supervision (*RW* = 7%, 46% of model R^2), trait self-regulation (*RW* = 4%, 25% of model R^2), and their interaction (*RW* = 4%, 23% of model R^2) each predicted unique variance in job tension; the control variables accounted for the remaining explained variance in job tension.

Finally, values were plotted across the range of abusive supervision scores for higher (i.e., one standard deviation above) and lower (i.e., one standard deviation below) levels of trait self-regulation (Stone & Hollenbeck, 1989; Stone-Romero & Liakhovitski, 2002). The slope for higher trait self-regulation was positive and significant (b = .79, t = 4.23, p < .01), whereas the slope for lower trait self-regulation was not significant (trait: b = .09, t = .58, *ns*). Overall, the results demonstrated that subordinates who reported higher levels of abusive supervision and trait self-regulation than others experienced the highest levels of job tension. Thus, Hypothesis 2 was supported.

6 | STUDY 3

6.1 | Procedures and participants

As recommended by Johnson et al. (2011), we used a time-separated data collection strategy for Study 3 in order to limit the effects of CMV. Surveys were administered approximately 3 weeks apart. Prior research examining abusive supervision (e.g., Tepper, Car, Geider, Hu, & Hua, 2009) has utilized a 3-week separation between data collection without substantial respondent attrition, which is especially important in abusive supervision research because subordinates who report the highest levels of abusive supervision are the most likely to not respond to follow-up surveys and/or stop working for their supervisors (Tepper, 2000). At Time 1, respondents were asked to respond to items that measured abusive supervision, state self-regulation, and trait self-regulation. At Time 2, respondents were asked to respond to items that measured job tension. All of the procedural techniques we utilized to limit the effects of CMV in Study 2 were applied to Study 3.

We distributed online surveys via a Qualtrics survey panel. Qualtrics Panel Services provides a paid service in which Qualtrics serves as a liaison between researchers and respondents. Qualtrics maintains a large panel of respondents and can target specific populations requested by researchers. For this study, respondents were paid 5 dollars for each survey they completed (i.e., up to 10 dollars if they completed the Times 1 and 2 surveys). All respondents were screened to ensure they were working adults in the United States who reported to a direct supervisor at an organization other than Qualtrics.

Three hundred fifty-four respondents were recruited for Study 3, 222 of which completed the survey at Time 1. All respondents who completed the Time 1 survey were asked to complete a second survey, yielding 109 useable surveys for Time 2 (31% completion rate). Demographically, the respondents (29% female) averaged approximately 47 years of age (M = 46.9, SD = 11.3), 13 years of organizational tenure (M = 13.2, SD = 10.1), and worked approximately 42 hr per week (M = 42.2, SD = 7.3). About 95% of respondents considered themselves full-time employees, whereas the remaining 5% classified themselves as part-time employees. A wide variety of industries were represented, with manufacturing (16.5%), retail trade (12.8%), and education/health/social service (10.1%) being the most prevalent. Approximately 77% of the sample served in a position of associate or below, with staff/associate level (35.8%) and middle management (24.8%) comprising the majority of the sample. Varied levels of education were represented, with Bachelor's degrees (37.6%), some college (23.9%), and Associate's degrees (14.7%) being the most prevalent.

6.2 | Measures

The measures used in Study 3 were nearly identical to those used in Study 2 and included trait self-regulation (α = .87), state self-regulation (α = .86), abusive supervision (α = .97), job tension (α = .91), and several control variables. However, the trait self-regulation measure was contextualized for the workplace in Study 3 such that "at work" was added to each item and each of the items was positively worded such that there were no reverse-coded items. A sample item is "At work, I can stop myself from doing something when I know it is wrong."

6.3 | Data analysis

The data analysis strategy used for Study 3 was identical to that of Study 2.

6.4 | Measurement model results

As with Study 2, we conducted CFAs with parcels to verify that our proposed measurement model fit the data appropriately. The measurement model for the Study 3 variables demonstrated an adequate fit to the data because all values (i.e., comparative fit index = .979,

RMSEA = .067, and standardized root mean residual = .048) met the acceptable cutoffs described in Study 2. Additionally, our measurement model demonstrated a better fit to the data than the alternative models (see Table 2). Means, standard deviations, and bivariate zero-order correlations for Study 3 are presented in Table 3. As with Study 2, the means, standard deviations, and correlations were in the expected direction and of the expected magnitude.

6.4.1 | Hierarchically nested covariance structure models

Following the procedure reported in Study 2, we examined the results of hierarchically nested covariance structure models. Similar to Study 2, results indicated that more of the variance was explained by the trait factor (70.2%) than the method factor (10.4%) or random error (19.4%). Thus, we concluded that common method bias likely did not pose a threat to the validity of our inferences.

6.5 | Results

As shown in Table 4, the results demonstrated support for the mediating role of state self-regulation in the relationship between abusive supervision and job tension. Specifically, the relationship between abusive supervision and state self-regulation was significant (β = −.28, $p < .01$), as was the relationship between state self-regulation and job tension (β = −.39, $p < .01$). Further, the indirect effect of abusive supervision on job tension through state self-regulation was significant (β = .11, $Z = 2.45$, $p < .05$). Thus, Hypothesis 1 was supported.

For Hypothesis 2, the results demonstrated that abusive supervision (β = .31, $p < .01$) and trait self-regulation (β = −.27, $p < .01$) were significant predictors of job tension ($R^2 = .21$). However, as shown in Table 5, the abusive supervision × trait self-regulation interaction was not a significant predictor of job tension (β = .04, *ns*). Relative weight analyses demonstrated that abusive supervision (*RW* = 11%, 51% of model R^2) and trait self-regulation (*RW* = 9%, 42% of model R^2) each predicted unique variance in job tension ($R^2 = .21$), but their interaction did not (*RW* = 0%, 1% of model R^2); the control variables accounted for the remaining explained variance in job tension. Thus, Hypothesis 2 was not supported.

7 | DISCUSSION

In this study, we conducted an experiment and two survey-based field studies in order to examine how the relationship between abusive supervision and self-regulation affected employees' job tension. We utilized two separate measures of trait self-regulation (i.e., brief self-control scale; Maloney et al., 2012) and state self-regulation (i.e., state self-control; Christian & Ellis, 2011; Twenge et al., 2004) to examine their relationship with each other and how they contribute individually to employees' job tension. Our results demonstrated that enduring (i.e., trait) and situation-specific (i.e., state) self-regulation uniquely affect subordinates' experienced job tension. Where the interaction between abusive supervision and trait self-regulation was associated with an increase in subordinates' experienced job tension, our results demonstrate that state self-regulation is generally beneficial for subordinates. Specifically, state self-regulation mediated the relationship between abusive supervision and job tension and was negatively associated with subordinates' experienced job tension.

Overall, Hypothesis 1 received full support across Studies 2 and 3, whereas Hypothesis 2 was only supported in Study 2. The inconsistency in support we found for Hypothesis 2 across samples likely stemmed from a study design choice. We used a revised measure of trait self-regulation in Study 3 that included all positively worded items with "at work" at the beginning of each item, whereas the measure of trait self-regulation in Study 2 contained reverse-worded items and did not specifically contextualize responses to the workplace by including "at work" at the beginning of each item. It is likely that by contextualizing each item to the workplace, respondents did not consider any self-regulatory lapses that occurred in nonwork domains (e.g., at home and leisure) when responding to the items, which lead to higher scores on trait self-regulation. Additionally, the workplace generally is associated with a requirement to self-regulate if employees desire to retain their job. Thus, the exclusion of nonwork domains, coupled with a context that generally is viewed as requiring self-regulation, provides a potential explanation as to why the mean ($M = 5.70$) for self-regulation in Study 3 (i.e., where "at work" was added to the measure) is *higher* than the mean ($M = 4.32$) of trait self-regulation in Study 2. We encourage future research to extend our findings by determining the effects of contextualizing the trait self-regulation measure.

7.1 | Theoretical and practical implications

This paper makes several contributions to the self-regulation literature. First, we examine the costs of self-regulation along the trait versus state distinction in order to incrementally advance our knowledge of the costs of enduring and situation-specific self-regulation. Rather than position self-regulation as a monolithic construct, we drew upon established theory and findings to investigate how each unique type of self-regulation affected job tension. In doing so, we provided evidence demonstrating the differences between the two forms of self-regulation and highlight how they differentially predicted our focal outcomes (i.e., job tension).

Our results demonstrate that trait self-regulation and abusive supervision can interact to increase job tension. The increase in job tension likely manifests when subordinates who possess high levels of trait self-regulation find themselves on the receiving end of negative exchange relationships that remain imbalanced. High-trait self-regulators' inherent abilities to self-regulate likely reduce their enactment of retaliatory behaviors directed at their supervisors; this inhibition of the impulse to follow negative reciprocity norms likely produces the strain associated with job tension. The enduring trend towards self-regulation may make individuals feel as if they are consistently on the receiving end of negative social exchange relationships. Thus, individuals high in trait self-regulation likely inhibit desires to retaliate against their supervisors, but they likely experience job tension due to the unrequited reciprocity norms that govern the social exchange relationships they share with their supervisors.

Second, we also found that state self-regulation—the actual store of self-regulatory resources responsible for subordinates' capabilities to inhibit their desires to retaliate against abusive supervisors—was associated with *decreased* job tension. State self-regulation represents

subordinates' abilities to self-regulate at a specific moment in time. Thus, subordinates who experience ego depletion (i.e., reduced stores of self-regulatory resources) have a reduced capability to resist the temptation to reciprocate their abusive supervisors' behaviors. Existing in an ego-depleted state is a precarious position for subordinates because retaliating against abusive supervisors can have impactful consequences that include administrative punishment, demotions, or even the loss of jobs. Therefore, subordinates with large stores of self-regulatory resources likely feel more "in-control" of their behaviors than others when confronted with perceived supervisory abuse. Subordinates who recognize this likely experience reduced job strain, and ultimately lessened job tension, because they possess stores of untapped self-regulatory resources that enable them to retain perceived control and suppress thoughts and behaviors that may damage the social exchange relationships they have with their supervisors.

Third, we integrate social exchange theory and ego depletion theory to incrementally advance our understanding of why trait and state self-regulation can differentially predict strain outcomes in the workplace (e.g., job tension). Recent empirical studies that draw from ego depletion theory (e.g., Lian, Brown, et al., 2014; Lian, Ferris, et al., 2014) have certainly advanced our understanding of the effects of self-regulation at work (Lord, Diefendorff, Schmidt, & Hall, 2010), but they overlook the impact of the strain associated with self-regulation. Ego depletion theory is exceptionally well suited to predicting individuals' behavioral responses to abusive supervision. However, ego depletion theory does not fully explain the complex relationships that exist between subordinates and the supervisors they perceive as abusive. The integration of social exchange theory and ego depletion theory enabled us to look beyond the basic ego-depleting relationship between abusive supervision and job tension, and instead hone in on the how the quality of the social exchange relationships affected by subordinates' job tension.

The addition of an experienced strain response to the self-regulation framework provides some clarity to what have often been described as disjointed findings in abusive supervision research (Tepper & Almeda, 2012) and provides novel insights into the application of ego depletion theory within abusive supervision research. Although the abusive supervision literature has matured in the past decade, additional research is still needed to examine constructs that moderate or mediate key relationships between abusive supervision and subordinates' job tension. Tepper's (2007) and Martinko et al.'s (2013) reviews of abusive supervision research, as well as the models of abusive supervision they proposed, made this clear but were not current enough to include self-regulation. It is apparent from this study's findings, which extend prior research findings and theorizing (e.g., Lian, Brown, et al., 2014; Lian, Ferris, et al., 2014), that self-regulation needs to be included in future models of abusive supervision.

Our findings have practical implications that organizations may wish to consider when considering how to reduce employee job tension. First, it is important to recognize that excellent self-regulators may not display signs indicative of an unwell employee (e.g., outbursts). Even worse, research suggests that these same employees likely are key contributors in their organizations, as demonstrated by self-regulation's positive relationship with work engagement and work performance (Johnson et al., 2014; Lanaj et al., 2014). As such, organizations likely would benefit from providing ways for employees to report perceptions of abusive supervision (e.g., anonymous reports, open-door policies, or hierarchical structures that include human resource personnel with the power to adjudicate issues between supervisors and subordinates). Second, social exchange relationships are characterized by patterns of exchanges. Thus, negative exchanges (e.g., subordinates who perceive that their supervisors abused them) may result in employees feeling as if they need to balance their social exchange relationships. Supervisors recognizing their mistake could consider making a preemptive attempt to rebalance the social exchange relationship by offering an apology rather than risking that their subordinates experience the harmful effects of imbalanced social exchange relationships (e.g., job tension).

7.2 | Limitations and future research

This study is not without limitations. First, each of the samples used in our studies were obtained through relatively new sampling procedures (i.e., respondents for Studies 1 and 2 were drawn from Amazon MTurk, whereas respondents for Study 3 were drawn from Qualtrics Panel Services). Although prior research has demonstrated the validity of the results obtained from these sampling sources (e.g., Paolacci et al., 2010; Sprouse, 2011) and their ability to contribute to studies published at top-tier management and psychology journals (e.g., *Journal of Organizational Behavior*; Carmeli et al., in press), they still need to be considered convenience samples. As such, it is difficult to generalize these results to specific populations (Highhouse & Gillespie, 2009). However, as noted by Lian, Brown, et al. (2014), the primary concern when choosing a sample is determining whether the sample adequately tests the theoretical frameworks utilized (e.g., social exchange theory and ego depletion theory). We attempted to examine phenomena that are applicable to virtually all workplaces, so the sampling techniques and demographically diverse samples of data we obtained are appropriate given the theoretical framework we used. Ideally, future research would replicate our findings within a large organization that allows for an entire subpopulation to be studied simultaneously.

Second, we were limited by the use of single-source, self-report data. This limitation can manifest itself in the form of common method bias, which can alter the obtained results. To mitigate against the effects of CMV, we used two studies (i.e., Studies 2 and 3) to test our hypotheses. Research has consistently demonstrated that time-separated data are more methodologically rigorous and less susceptible to the effects of CMV than cross-sectional data (Johnson et al., 2011; Podsakoff et al., 2012; Podsakoff et al., 2003), so we used time-separated data in Study 3. In addition to using time-separated data, we followed several recommended procedural remedies for addressing CMV, such as including other short measures in the surveys to conceal the true purpose of the study, using a variety of response scale formats (i.e., *I cannot remember him/her ever using this behavior with me* [1] to *he/she uses this behavior very often with me* [5]; *not at all like me* [1] to *very much like me* [7]; *strongly disagree* [1] to *strongly agree* [7]; *never* [1] to *always* [7]; and *never* [1] to *daily* [7]), including instructed quality check items (Desimone et al., 2015; Meade & Craig, 2012), and protecting respondents' anonymity (Podsakoff et al., 2003). Finally, CMV generally does not create artificial interaction effects

(Evans, 1985; Siemsen, Roth, & Oliveira, 2010), so it is unlikely that CMV had a substantive effect on the interaction effect we detected.

Third, the inclusion of either strain or tension in our experiment would have provided more support for our hypotheses. We intended for the experiment to demonstrate that state self-regulatory resources can be depleted when exposed to an ego-depleting task, whereas trait self-regulation remains constant. However, including the dependent variable from Studies 2 and 3 would have increased the importance of our experiment and expanded its scope to encompass the entirety of this investigation. We recommend that future research using experiments to discern the role of trait and state self-regulation build upon the foundation we provide by examining how trait and state self-regulation affect individuals' perceptions and behaviors.

Additionally, future research could consider the various outlets subordinates use to alleviate their psychological distress (i.e., job tension) that stems from abusive supervision. If employees choose not to balance social exchange relationships with their supervisors, then it is likely that another facet of their life will become an outlet in which they can alleviate their psychological distress. This may manifest in abusing others at home, self-directed abuse (e.g., alcoholism), or bullying others in their peer group. Prior research has identified many of these behaviors as outcomes of abusive supervision, but further clarification of self-regulation's role in these relationships may provide an explanation as to why some people find "relief" from abusive supervision through negative behaviors at home instead of the workplace (Hoobler & Brass, 2006). Research using ego depletion theory has yet to fully specify why self-regulation in the workplace affects negative behaviors at home, but the novel theoretical development and approach to examining differences between trait and state self-regulation used in this study mark an important step towards extending the application of ego depletion theory to employees' negative psychological and behavioral outcomes at work and elsewhere. We hope that this study's findings stimulate further research into this important area of inquiry.

8 | CONCLUSION

The results we obtained across three studies demonstrated that trait and state self-regulation are related, but distinct, forms of self-regulation. Further, our results demonstrated that trait self-regulation interacts with abusive supervision to predict job tension, whereas state self-regulation is an important mechanism (i.e., mediator) through which abusive supervision indirectly affects job tension. Overall, the results demonstrate that state self-regulation tends to decrease job tension, whereas employees who report higher levels of trait self-regulation actually report greater levels of job tension than others as abusive supervision increases. Our novel integration of social exchange and ego depletion theories offers new insight into the differences in trait and state self-regulation that affect the relationship between abusive supervision and job tension. We hope that our findings enable self-regulation and abusive supervision scholars to advance theory and research in these important areas, as well as empower practitioners to understand how employees' trait and state self-regulatory capabilities affect workplace outcomes.

ACKNOWLEDGEMENTS

We would like to thank the Society for Human Resources Management (SHRM) for providing Charn McAllister with a research grant that provided the funding necessary to conduct the experiment detailed in Study 1. Also, we are grateful to the National Institute for Occupational Safety and Health (NIOSH) Pilot Research Project through the Sunshine Education and Research Center at the University of South Florida for funding Jeremy Mackey with a research grant that provided data for the third sample of data that was examined in this study.

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How to cite this article: McAllister CP, Mackey JD, Perrewé PL. The role of self-regulation in the relationship between abusive supervision and job tension. *J Organ Behav*. 2017;1–14. https://doi.org/10.1002/job.2240